

**United States Department of the Interior
National Park Service**

For NPS use only

**National Register of Historic Places
Inventory—Nomination Form**

received

date entered

See instructions in *How to Complete National Register Forms*

Type all entries—complete applicable sections

1. Name

historic CHESAPEAKE AND DELAWARE CANAL PUMP HOUSE NATIONAL HISTORIC LANDMARK

and or common The Old Lock Pump House

2. Location

street & number _____ not for publication

city, town Chesapeake City (South) _____ vicinity of

state Maryland code _____ county Cecil code _____

3. Classification

Category	Ownership	Status	Present Use	
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input type="checkbox"/> agriculture	<input checked="" type="checkbox"/> museum
<input checked="" type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial	<input type="checkbox"/> park
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational	<input type="checkbox"/> private residence
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment	<input type="checkbox"/> religious
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government	<input type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial	<input type="checkbox"/> transportation
		<input type="checkbox"/> no	<input type="checkbox"/> military	<input type="checkbox"/> other:

4. Owner of Property

name The United States Army Corps of Engineers, Philadelphia District
Custom House

street & number 2nd and Chestnut Streets

city, town Philadelphia _____ vicinity of _____ state Pennsylvania

5. Location of Legal Description

courthouse, registry of deeds, etc. Cecil County Courthouse

street & number Main Street

city, town Elkton _____ state Maryland

6. Representation in Existing Surveys

title Historic American Engineering Record has this property been determined eligible? yes no

date Summer 1977 HAER No. MD-39 federal state county local

depository for survey records Library of Congress

city, town Washington, D.C. _____ state District of Columbia

7. Description

Condition		Check one	Check one
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input type="checkbox"/> moved date _____
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed		

Describe the present and original (if known) physical appearance

The Old Lock Pump House National Historic Landmark is part of a cluster of buildings at the Back Creek Mooring Basin site, the south side of the Chesapeake and Delaware Canal in Chesapeake City, Cecil County, Maryland. The complex of buildings shares party/structural walls, and as a unit, they once comprised the lift wheel pumping station of the Chesapeake and Delaware Canal.

The south elevation of this row of buildings clearly illustrates that the complex is composed of five separate, albeit architecturally linked, nineteenth century facades. These buildings were built in phases from 1837 through 1854. The exteriors of these structures are constructed of fieldstone, brick and clapboard materials. Since they are modest in detail, scale, and in construction fabric, the buildings present a rural vernacular, non-industrial appearance, quite different from many other early nineteenth century technical/industrial compounds.

The engineering firm of Merrick and Sons, Philadelphia, was contracted by the Chesapeake and Delaware Canal Company in 1851 to design an updated steam engine powered scoop wheel. The firm also built the structures which housed the pumping equipment. Although the dates for the machinery installation are well documented, the building construction dates are not precisely known. However, it is obvious that the buildings are of slightly earlier vintage than the equipment that the structures contained.

Each building is essentially a one-story structure with open space throughout the interior. The three tallest buildings have second-story windows cut into the facades. However, there are only cat walks, no full second-story floors within the interiors. Most of the windows throughout the complex are six over six or three over three lights.

The north side of this grouping presents a more unified design scheme, possibly because the fieldstone and brick exteriors are covered with ivy, which lends a certain visual harmony. Some alterations have occurred over the years. The roofs of the buildings were replaced after a fire in 1856. Also, the Federal Government restored the buildings in the pumping plant after 1926, but there is no specific data about the nature of that work. The current administrator mentioned the demolition of a store house, reputed to have contained an alternate air pump for the lift wheel. This probably occurred after 1918, at the time that the Federal Government purchased the property.

Building Description

1. The Old Steam House

Standing before the south elevation, the oldest building in the complex is to the far right. This structure, called the Old Steam House, was erected in 1837. Although, it once housed the original steam engine and boiler, the building and its equipment eventually became obsolete. The original mechanical equipment was sold, and apparently, no longer exists. This structure is now used as a storage facility by the U.S. Army Corps of Engineers. The one-story building is constructed of field stone and has an asphalt shingle roof.

8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600-1699	<input checked="" type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/ humanitarian
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input checked="" type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> theater
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> transportation
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics government	<input type="checkbox"/> other (specify)
		<input type="checkbox"/> invention		

Specific dates

Builder Architect

Statement of Significance (in one paragraph)

The nineteenth century canal systems were an important aspect in the technology of American transport, production, and distribution of goods. Remote, non-coastal areas of the United States were effectively linked to major ports through canals, thereby fostering an exchange of ideas and commerce long before interstate roads and rail systems reached their peak.

The structures that formed the Old Lock Pump House complex at Chesapeake City, Maryland were a key element to the successful operation of the Chesapeake and Delaware Canal. These buildings housed the engineering equipment that pumped, supplied, and replaced water lost from the summit level of the canal due to locking, leaks, and evaporation.

The original engine at Old Lock Pump House site operated from 1837 until 1851. After this original steam equipment became taxed beyond efficiency, the massive water wheel, raceway, boilers, and two Merrick steam cylinder engines were installed. The two high pressure, single cylinder beam engines, built by Merrick and Sons of Philadelphia in 1851, are the earliest American built stationary steam engines on their original foundations in the United States. Also, the existing water wheel, which was the sturdier replacement model in 1856, of the 1851 wheel, is one of the last surviving examples of its kind. With the exception of the boilers, which were replaced twice due to corrosion, the machinery now on exhibit continued in use until shut down in 1926.

The Chesapeake and Delaware Canal was purchased by the Federal Government for over two million dollars in 1919. In 1927, the Chesapeake and Delaware Canal was modernized, becoming a lock free, sea level canal. Since then, the U.S. Army Corps of Engineers has maintained the Old Lock Pump House property, turning the complex into a technology exhibition for the public.

9. Major Bibliographical References

See Continuation Sheet

10. Geographical Data

Acres of nominated property 1/4 acre

Quadrangle name Elkton Quadrangle

Quadrangle scale 1:24000

UTM References

A

1	8	4	3	0	3	2	0	4	3	7	5	2	2	0
Zone		Easting				Northing								

B

Zone		Easting				Northing								

C

Zone		Easting				Northing								

D

Zone		Easting				Northing								

E

Zone		Easting				Northing								

F

Zone		Easting				Northing								

G

Zone		Easting				Northing								

H

Zone		Easting				Northing								

Verbal boundary description and justification

See Continuation Sheet 10-1

List all states and counties for properties overlapping state or county boundaries

state _____ code _____ county _____ code _____

state _____ code _____ county _____ code _____

11. Form Prepared By

name/title Pacita T. de la Cruz, Architectural Historian (Original forms - J.S. Mendinghall and F.S. Melvin)

organization National Park Service date 5/23/85

street & number 600 Arch Street telephone (215) 597-1161

city or town Philadelphia state PA

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

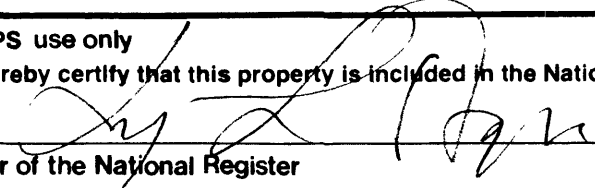
national state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature _____

title _____ date _____

For NPS use only
I hereby certify that this property is included in the National Register


Keeper of the National Register date 9/12/85

Attest: _____ date _____

Chief of Registration

**United States Department of the Interior
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OLD LOCK PUMP HOUSE NATIONAL HISTORIC LANDMARK

Continuation sheet 7. DESCRIPTION

Item number 7-1

Page 1

For NPS use only

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2. Boiler House

Facing south, the next oldest building stands at the western end of the row. It was built around 1851, and originally functioned as the boiler house for the compound. This structure currently serves as the Chesapeake and Delaware Canal Museum. The interior has been adaptively re-used, now housing exhibit space and visitor facilities. The original portion of the structure is built of fieldstone. There is an extension in the form of a brick shed with a flat roof attached to the south-east end of the boiler house. A brick smoke stack/chimney marks the north side of this building.

3. West Engine Building

Facing south to the right of the Boiler House is the West Engine Building, also built in 1851. Chestnut beams span the interior of this structure, as well as the interior of East Engine Building. Cast iron columns support the beams above the engines. This stone structure appears to be two stories in height, but is actually open inside to accommodate the engines and technical equipment.

4. Wheel House and Raceway

The Wheel House and Raceway areas take up the center of the complex. This building, constructed in 1851, contains a great lift wheel, 39 feet in diameter and 10 feet wide, made of white oak, cypress, and iron. The wheel was once capable of pumping 20,000 gallons (or 130 tons) of water per minute in only one and one-half revolutions. The Raceway is laid in large slabs of blue stone slate cemented together with mortar. The thick stone walls of the wheel house form a well that is 18 feet high, 22 feet deep, and 10 feet 8 inches wide.

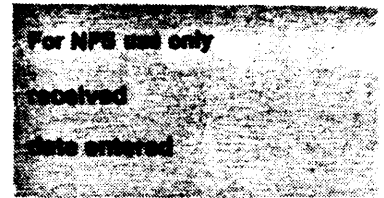
The lift wheel hub and discharge ports on both east and west sides of the Wheel House are visible through a semi-circular rowlock arch of brick, set into the respective stone walls on either side of the lift wheel. Framed (wooden), one pane glass windows are now fitted into the arches in order to protect the wheel. These sections of the lift wheel have been treated as an exhibit by the U.S. Army Corps of Engineers. Two other rectangular openings located in these walls at the upper right above the arches are also window display treatments.

5. East Engine Building

The latest building in the grouping is the East Engine Building. The structure is very similar architecturally to the West Engine Building. It was erected two years after the West Engine Building, between 1853 and 1854.

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Inventory—Nomination Form**



Continuation sheet 9. Major Bibliographical References 9-1
Item number

Page 1

- Bath, Greville, "The Lift Wheel Pumping Plant of the Chesapeake and Delaware Canal" An Engineer's Miscellany, Philadelphia, 1938.
- Snyder, Frank E. and Guss, Brian, The District: A History of the Philadelphia District, U.S. Army Corps of Engineers 1866-1971, Philadelphia, 1974.
- U.S. Army Corps of Engineers, "The Chesapeake and Delaware Canal" published by the U.S. Army Corps of Engineers, Philadelphia, 1974.
- U.S. Army Corps of Engineers, "National Historic Mechanical Engineering Landmarks, Chesapeake and Delaware Pumping Machinery, Scoop Wheel and Engines, Chesapeake City Maryland, October 25, 1975." Published by the U.S. Army Corps of Engineers, the American Society of Mechanical Engineers. (Program, dedication ceremony, October 25, 1975.)
- National Park Service, "Chesapeake and Delaware Canal Pump House" (HAER No. MD-39), Written and Descriptive Data, Historic American Engineering Record, National Park Service, Department of the Interior, Washington, D.C., 1977.

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Continuation sheet 10. Geographical Data

Item number 10

Page 1

BOUNDARY JUSTIFICATION

Through necessity, the boundaries that define the landmark isolate the architectural aspects from the landscape components of the Chesapeake and Delaware Canal's Old Lock Pump House facility. Because this canal has been in continuous use for nearly 150 years, many changes have occurred to the site, including major dredging and land fill operations, which have altered the original sense of place pertaining to the Old Lock Pump House. These changes over time have not diminished the architectural or historical integrity of the five original buildings, but they have affected the character of the historic landscape. The Pump House complex, now overlooking the expanse of modern canal waterway, is out of scale since it once regulated a much smaller portion of Chesapeake and Delaware Canal. It is ironic that the historical landscape, which was the catalyst for the development of the architectural complex, has been so extensively altered that it is no longer a complement to the NHL.

Excluded from the boundary are the main group of maintenance structures, which are pre-World War II vintage temporary structures, located directly southeast of the Pump House. These buildings, while adding reality to the site's industrial/technical associations, past and present, do not add to the architectural or historical significance of the compound. Another dominant building on the site, although not assessed as a contributing structure to the Old Lock Pump House complex, is the Engineer's Office. This white clapboard sheathed, late nineteenth century structure, located to the west of the Pump House, currently contains the radio signal dispatch station as well as the administrative offices for the Army Corps of Engineers at the Chesapeake and Delaware Canal. It has been excluded from the NHL boundary because it was not a part of the original pumping station's engineering structures.

BOUNDARY DESCRIPTION

Entering from the south gate, consider about 20 feet south of the southeast corner of the Old Steam House as Point A, the point of beginning. Proceed north along the east elevation of the Old Steam House to Point B, on the south shoreline of the Chesapeake and Delaware Canal, (about 20 feet north of the northeast corner of the Old Pump House). Proceed in a westerly direction, hugging the shoreline to Point C, (about 20 feet due north of the northwest corner of the Boiler House). Thence, proceed in a southerly direction along the west side of the Boiler House, past the museum entrance to Point D, about 10 feet south of the southwest corner of the Boiler House proper, to include the one-story rear entry attachment to the museum. Finally, proceed in an easterly direction along the south elevation of the complex to the point of origin.